

INSANITY.

Definition.—Loss of control of the will over the mental faculties or impulses; intellectual, or emotional, sensorial derangement.

Varieties.—1. **Mania**; acute¹ and chronic; also divisible into intellectual insanity or *delusion*, emotional or *moral* insanity, and illusional derangement or *hallucination*. 2. **Monomania**, or partial insanity; *e. g.*, homicidal and suicidal; *kleptomania*, or insane propensity to steal; *erotomania* (satyriasis, nymphomania), or uncontrollable amatory desire; *pyromania*, morbid propensity to commit arson, etc. 3. **Melancholia**. 4. **Dementia**; *i. e.*, total wreck of the faculties, or imbecility. **Idiocy** is congenital imbecility.

Premonitions.—By noticing these, often *prevention* may be suggested and effected. Hardly any of them alone may be sufficient, while altogether they become so. 1. Headache, not accounted for by ordinary causes, and continuing for days or weeks together. 2. Irritability of temper, not previously habitual. 3. Unnatural hilarity without occasion. 4. Depression or gloom, not justified by any event. 5. Alternations of excitement and despondency, both extreme. 6. Any great modification of the natural temper or habit of mind, so that the individual becomes the opposite of his usual self. 7. Dislike or distrust of near friends and family, without any reason for it.

Diagnosis.—Alienation from his own accustomed character and disruption from rational and harmonious relations with persons and things around him—these are the cardinal elements of the insane state. This, all authorities admit to be more easily detected or discriminated than defined. The old legal test, that the lunatic must be incapable of knowing right from wrong, must be given up; as very many cases of emotional or “moral” insanity are proved to exist, in which, with full knowledge of right and wrong, the morbid impulse is irresistible by the will. There is no *physical* test of insanity by the pulse or otherwise; as in chronic mania, etc., all the organic functions may go on normally. The expression of the face is, it is true, nearly always unnatural. Perhaps the greatest difficulty sometimes exists in monomania, unless one knows the peculiar delusion or morbid proclivity of the patient, as upon all other matters he may be sound. *Feigned* insanity is generally overacted; sometimes it may require the skill of experts to expose it. Not unfrequently *anaesthesia* may be used to advantage in effecting this exposure.

Prognosis.—More than half of first attacks of insanity, under good management are recovered from. With each repetition, the hope grows less; and so it does, also, in proportion to the *duration* of chronic mania. Sometimes, however, cures occur of those who have been insane for years. Dementia is a common, and generally hopeless, termination of prolonged chronic mania or melancholia. Puerperal mania is curable in a large majority of cases. Ordinary acute mania varies in duration from a week or two to several

¹ Puerperal insanity is one form of acute mania.

months. Its worst form is the “acute delirious mania” of authors; sudden, chaotic, and prostrating. It may end either in recovery, in lapsing into chronic mania, in dementia, or even in death during the attacks. *Periodical* insanity is occasionally met with, especially in females.

Causes.—These are numerous. The principal ones are hereditary predisposition, injuries of the head, intemperance, reverses of fortune, loss of friends, and domestic troubles.

Pathology.—Much yet remains to be learned of this. Subtle alterations of the brain-structure are still to a considerable extent unrecognizable, even with the aid of the microscope. Two elements in the pathology of insanity have been distinctly made out: cerebral *hyperaemia*, which predominates in the more acute cases, and *atrophy*, which is (either quantitative or qualitative) present in nearly all those which are chronic.

Dr. J. B. Tuke¹ asserts that, of all portions of the brain found altered after death in those dying insane, the *corpora striata* are most frequently, and the cerebellum the least often, affected.

For the **treatment** of insanity it is proper to refer to special treatises upon the subject. (*See* Bucknill and Tuke or Blanford, on Insanity.) The advice of a physician in nearly every case ought to be, early removal to a well-conducted asylum or hospital for the insane. There, security and the prospect of recovery will be much better than at home amongst the kindest of friends. In the treatment of insanity, in recent times, while the use of medicine (especially tonics and hypnotics) is not neglected, the tendency is to confide a great deal in moral or mental treatment; *i. e.*, the aggregate of personal, local, and circumstantial influences, which in an asylum can be arranged especially with a view to the most favorable effect upon its inmates. The placing of insane patients, not violent, under the care of private families (as at Gheel) has recently been found sometimes productive of beneficial results. But the abandonment of the hospital plan (with which the other can be combined) altogether, in favor of this, would be, no doubt, as great a mistake as the often urged (Gardiner Hill, Conolly) *total* abolition of mechanical *restraint*.

HEMORRHAGES.

Varieties.—1. Active; 2. Passive; 3. Traumatic; 4. Symptomatic; 5. Critical; 6. Vicarious. Local hemorrhages are also classified according to the organ from which the blood escapes.

Active hemorrhages are those in which determination of blood in excess to the part precedes the bleeding. **Passive** hemorrhages, those in which from inaction of the circulation, or passive dilatation of bloodvessels, congestion occurs; or in which the coats of the vessels give way too rapidly, partly from the blood itself being incapable of maintaining properly their nutrition. The idea of bleeding by “exhalation” without rupture at least of capillaries, is now abandoned.

¹ Medical Press and Circular, Aug. 16, 1871.

Certain persons (sometimes by inheritance) have a constitutional tendency to hemorrhages. This has been called *hæmophilia* by some authors (J. W. Legg). A slight wound, as the extraction of the tooth, or the removal of a wen, may in such persons be followed by bleeding to death; or they may die from epistaxis or some other spontaneous hemorrhage. It has not been shown whether the peculiarity in these cases exists in a deficiency of coagulability in the blood; a defective contractility in the small arteries, or (as some German writers have asserted) an excessive violence in the propulsion of the blood by the heart. Probably the quality of the blood has the most to do with it.

Brown-Séguard and Nothnagel, on the basis of experimentation upon animals, assert that mechanical injuries of the brain predispose to pulmonary hemorrhage; and Baréty (*Lancet*, May 23, 1874) has confirmed this by observation in one accidental case in a human subject.

Traumatic hemorrhages are, of course, all produced by wounds; coming thus under the department of surgery.

Symptomatic hemorrhages are met with in many diseases; *e. g.*, epistaxis in typhoid fever; hæmoptysis in consumption; vomiting of blood in cancer of the stomach; bleeding from the bowels in piles, etc.

Critical hemorrhages are occasional terminations of febrile disorders; as, yellow fever, remittent fever. **Vicarious** hemorrhage is that which substitutes one which is normal or habitual; *e. g.*, spitting of blood when the menses have been suppressed; or bleeding at the nose following the arrest of the bleeding of habitual hemorrhoids.

Epistaxis.—By usage, this term is applied only to bleeding from the nose. In young persons, especially from ten to fifteen years of age, it is common, and, if moderate, harmless; seeming often to relieve a temporary congestion and prevent a headache. It is more often seriously troublesome when it occurs in older persons. Generally it is from one nostril only, but not always.

Treatment.—When slight, it may be allowed to stop of itself; only not blowing away the clot that forms as a natural plug. If it continue so as to threaten an injurious loss of blood, applying cold water to the forehead and nose, or *ice*, there or to the back of the neck, or to the roof of the mouth, will generally stop it. If not, a plug of dry cotton may be introduced and left in the bleeding nostril. Wetting the cotton first in strong alum-water, or dilute tincture of chloride of iron, or dipping it in powder of tannin or matico may make it more effective. When these measures fail, the posterior nares must be plugged. Either the watch-spring canula may be used, or an elastic catheter, having a piece of waxed ligature or twine passed through its eyelet-hole, may be carried back through the nostril to the pharynx. Then one end of the string should be drawn out of the mouth with forceps, a plug of cotton fastened to it, and the other end drawn through the end of the catheter till it forces the plug against the posterior orifice of the nares. Raising the arms high above the head is a popular mode of endeavoring to stop nose-bleeding. Dr. Marvin,¹ of Geneva,

¹ *Gaz. Med. d'Ital. Lomb.*, May 17, 1873.

asserts that pressure upon the facial artery, where it passes over the lower jaw, will have the desired effect, by lessening the supply of blood to the nose.¹

Bleeding from the Mouth.—This, unless when ulcerative, is generally from the gums; as in scurvy. It is, in itself, scarcely ever serious in amount. Considerable bleeding, sometimes hard to stop, may occasionally follow the extraction of a tooth.

Treatment.—Borax in solution, or tannic acid, or myrrh and rose-water, will be suitable washes for the bleeding and spongy gums of scurvy. For hemorrhage after the removal of a tooth, it may be necessary to plug the cavity with lint or cotton dipped in tincture of chloride of iron, or creasote.

Hæmoptysis.—This term (spitting of blood) is generally applied to hemorrhage from the lungs, bronchial tubes, trachea, or larynx. Ulceration of the larynx, trachea, or bronchi may produce it, not often dangerously. I remember one case, in which ulceration of the larynx extended so as to open the carotid artery, with fatal result. More often the source of the blood is the lungs. The diagnosis of this is of great consequence. I have known much alarm to be produced by the spitting of blood whose source examination proved to be the posterior nares. This was not supposed by the patient, because there was no bleeding anteriorly from the nose. Between pulmonary hemorrhage and that from the stomach, the following contrast of signs exists:—

<i>From the Lungs.</i>	<i>From the Stomach.</i>
Dyspnoea.	Nausea.
Blood coughed up.	Blood vomited.
“ flrid, sometimes frothy.	“ dark, not frothy.
“ mixed with sputa.	“ mixed with food.

In a majority of instances, spitting of blood from the lungs is a symptom of phthisis. Cases occur, however, sometimes, especially during adolescence and early maturity (from 18 to 30 years of age) of more or less active pulmonary hemorrhage, whose subsequent history disproves a tuberculous origin for it. In these cases there may be immediate danger, more probably than in the frequent bleedings of consumption. Aneurism of the aorta may also cause hæmoptysis by rupture of the tumor, which must cause death. This of course is rare, and is made known by signs already considered.

Treatment.—For active, congestive pulmonary hemorrhage, in a young and robust person, it was formerly the common practice to take blood from the arm, as a *derivant* measure. I have known this to succeed perfectly, with no subsequent disadvantage. But dry cupping over the chest and back, with sinapisms to the legs, and ice, salt, or alum, swallowed slowly, the patient being at perfect rest in bed, with the head and shoulders raised, will be sufficient treatment at the start for most cases. Then we should prescribe, if the bleeding continue after the first gush, acetate of lead with opium in pill; say a grain or two of the former with half a grain of the latter, every four, three, or two hours, as the case needs, for a day or two. Applying a tourniquet or some other

¹ Tiemann, of New York, now makes Malavasi's dilatable india-rubber bag for the nostril. See *N. Y. Med. Record*, Aug. 15, 1874.

mode of ligation around one or more of the limbs, so as to retard the venous flow of blood towards the heart, has sometimes had a good effect in serious hemorrhages.

In passive or tuberculous hæmoptysis, rest, with the head and shoulders propped, is necessary. Ice, salt, and alum, alone or together, may be held in the mouth and swallowed very slowly till the bleeding has stopped for the time. For medicines, in the anæmic, gallic acid (gr. x to gr. xxx, in solution with aromatic sulphuric acid) [F. 146], oil of turpentine (gtt. x to gtt. xx in mucilage) [F. 147], and ammonio-ferric alum (gr. v to gr. x), or tincture of chloride of iron, are most recommended. Dr. Anstie¹ prefers ergot, or ergotin, hypodermically or by the stomach, as most efficacious. Drasche, of Vienna, introduced the hypodermic use of ergotin for internal hemorrhages, in 1868; reporting several successful cases. *Quinine* is employed by some physicians (Caro²) to "quiet the action of the heart" in obstinate cases of hemorrhage. But dosing with styptics in consumption is not proper for every trifling discharge of blood. They are suitable only when the hemorrhage itself is, or threatens to be, a source of additional debility.

Pulmonary Apoplexy.—This is the extremest degree or result of congestion of the lungs; hemorrhage occurring into the air-cells, and obstructing respiration, sometimes to a fatal degree. Disease of the heart predisposes to this. Its attack is apt to be somewhat sudden; there is great dyspnoea, with a purple countenance, and skin rather cold. Percussion-resonance is dull. On auscultation, at first, a bubbling or mucous râle is heard; after the blood coagulates, no respiratory sound at all.

Treatment.—If diagnosed early, in a person of tolerable strength, venesection should be performed at once. Then (or instead in a feebler subject) dry or cut cups should be applied extensively between the shoulders; followed by a large sinapism over the anterior part of the chest, and a hot pediluvium. At the same time the reaction which should aid in unloading the oppressed lungs (the object of venesection, cupping, etc.), may need to be favored by hot drinks, as hot lemonade, carbonate of ammonium, or, if coldness be decided, whisky punch.

Hæmatemesis.—Vomiting of blood may result from cancer, or ulcer of the stomach, congestion of the liver, aneurism of the abdominal aorta, hysterical disorder, vicarious menstruation, etc. We have given, above, the distinguishing signs between it and hæmoptysis.

Treatment.—This must be varied according to the cause. Slight ejections of blood from the stomach may not of themselves require treatment—having only a diagnostic importance. In ulcer of the stomach the greatest danger may occur, except from rupture of an aneurism. In copious hæmatemesis, with absolute rest in the horizontal position, ice, creasote (one or two drops, *pro re nata*), in solution or pill [F. 81], gallic acid [F. 146], oil of turpentine [F. 147], ammonio-ferric alum, or tincture of chloride of iron, may be prescribed. Food must be given in small quantities, and concentrated.

¹ Practitioner, Feb., April, and May, 1873.

² N. Y. Med. Record, June 1, 1874.

Hæmaturia.—This may be either from the kidneys or from the bladder. If the blood is thoroughly mixed with the urine, it is probably renal. If the water flows off nearly pure, and the blood follows or accompanies the last portion, it is vesical. When it follows the use of a catheter or bougie, independently of urination, and flows in a stream or in fresh drops, it is urethral and traumatic.

Renal hemorrhage may attend congestion or inflammation of the kidney; or cancer; or scarlet fever (generally a late stage); or the irritation of a calculus; or that of cantharides or turpentine; or, in old persons, it may be passive. In Egypt, a parasite sometimes produces it, the *distoma* (*Bilharzia*) *hæmatobium*.

Treatment.—For hemorrhage from the kidney sufficient to deplete at all seriously, astringents, as gallic acid, tincture of chloride of iron, alum, or acetate of lead, may be used. Rest is important, in this as in all hemorrhages, during the attack. Bleeding from the bladder may be treated by the injection, through a catheter, of solution of alum or dilute solution of creasote (gtt. j in fʒj of water) or tannic acid (gr. x in fʒj).

Intestinal Hemorrhage.—A frequent cause of this is typhoid fever, of which it is sometimes symptomatic, and occasionally critical; *i. e.*, the commencement of convalescence. The same may occur in yellow fever, or in remittent fever (less often). Aneurism of the aorta, congestion of the liver, abdominal cancer, may cause it. Blood is passed, commonly in small quantity, with the discharges of dysentery. Aged persons not unfrequently have passive hemorrhage from the intestines. Internal piles are very often productive of it. The blood from the latter is bright red; other bleeding from the bowels is darker and more mixed.

Treatment.—Acetate of lead, by the mouth, with opium, or by enema; tannic or gallic acid, in pill or by injection, in solution; oil of turpentine; creasote and tincture of chloride of iron, or ammonio-ferric alum, are here, as in the other hemorrhages mentioned, the most reliable astringents. For bleeding piles special treatment has already been alluded to.

Vicarious Hemorrhage.—The most frequent instances of this are in connection with suppressed menstruation. Epistaxis, hæmoptysis, hæmatemesis, renal or intestinal hemorrhage may occur, but it is most apt to be from the stomach or lungs. The prognosis in this form of hemorrhage is much less serious than in the same of other origin. Its treatment should be addressed mainly to the regulation of the disturbed or interrupted uterine function. Warmth to the lower extremities and back, with such *emmenagogues* as each case may indicate, will generally be required. Astringents are to be avoided in vicarious hemorrhage, unless it be in excess of the ordinary menstrual or other suppressed discharge.

Uterine Hemorrhage.—Besides simply excessive menstruation, uterine hemorrhage may be from placenta prævia ("unavoidable hemorrhage"); abortion; subsequent to delivery; uterine cancer; ulceration of the os and cervix uteri; tumors within, or in the walls of the womb.

Treatment.—In considerable uterine hemorrhage of either variety, ergot, in substance or the wine, is likely to be of use by

promoting contraction of the womb. Ammonio-ferric alum is also a good medicine to give by the mouth in the same case. Dr. Robert Lee has recommended *digitalis* in monorrhagia; using rather large doses, but not continuing them long. Locally, ice or iced water may be (with care not to chill too much) applied for a short time over the hypogastric region, or thrown into the vagina. Tincture of chloride of iron, in strong solution, will have a powerful effect. Tannic acid or matico may be likewise applied, or the "styptic rod" of tannic acid and cocoa-butter, shaped to fill the vagina. But threatening cases (except *post partum*) may require the actual *tampon*, or plug of lint for the whole vagina, or the sponge-tent inserted into the os uteri itself. Stimulants may at times be called for, to prevent fatal exhaustion under large hemorrhage, either from the uterus or from any other organ. Pressure upon the aorta has sometimes been resorted to, through the abdominal walls, in uterine hemorrhage. Other measures, suitable after delivery, belong to the department of obstetrics.

Habitually excessive menstruation requires that the patient so affected should maintain absolute rest, from the beginning of the flow till its cessation. Iron is nearly always indicated in such cases through the interval; particularly the tincture of the chloride of iron.

DROPSICAL AFFECTIONS.

Varieties.—1. *Edema*, local infiltration of connective tissue with serum. 2. *Anasarca*, general cellular dropsy. 3. *Hydrocephalus*. 4. *Hydrothorax*. 5. *Hydropericardium*. 6. *Ascites*. 7. Other local dropsies; as *Ovarian dropsy*, *Hydronephrosis*, *Hydrocele* of the testis, etc.

Causation and Pathology.—Obstruction to the venous circulation, arrest of excretion and absorption, and excess of water in the blood, are the three cardinal elements of the pathological causation of dropsy. Either one may induce it. Disease of the heart, or of the liver, brings on dropsy by venous obstruction. Disease of the kidney, or the action of cold and wet upon the skin, may produce it by checking excretion. Wasting diseases are liable in their advanced stages to oedema and anasarca, on account of the watery state of the blood.

Acute general dropsy results from the powerful impression of cold and wet, or of the scarlet fever poison, upon the system, suppressing both the action of the kidneys and that of the skin at once. Its most common form is anasarca; but it may take that of ascites, hydrothorax, or even hydrocephalus. When from cold and wet, it is much more curable (especially anasarca or ascites) than similar dropsy of *visceral* origin, *e. g.*, from disease of the heart. Albuminous urine is quite common in acute general dropsy.

Hydrocephalus, *Hydropericardium*, and *Hydrothorax* have been already sufficiently considered.

Ascites is peritoneal dropsy; accumulation of water in the abdomen. The **causes** of this of greatest frequency are cirrhosis of the liver and disease of the kidney. It may also follow obstruc-

tion of the portal vein by cancer, or general obstruction of the circulation from disease of the heart, aorta, or spleen; and it is sometimes ascribed to chronic peritonitis.

Symptoms and Diagnosis.—Often with emaciation of the face, neck, and arms, there is great enlargement of the abdomen. When this is far advanced, *orthopnoea* exists, from pressure upon the diaphragm. The patient is generally weak, with poor appetite and deficient rest at night.

On *inspection*, in the upright posture, the fulness is greatest in the lower part of the abdomen; when recumbent, it spreads evenly; on one side, it falls over that way. *Palpation* will make evident *fluctuation*, especially when one hand is placed on one side of the abdomen and the other strikes gently, at a distance of a few inches. *Percussion* discovers resonance above and about the umbilicus, the intestines rising there upon the fluid to the surface under the abdominal walls. Elsewhere the sound is dull, even flat.

The amount of fluid in ascites is sometimes immense; as much as twenty-five pints have been withdrawn at once by tapping. It is generally clear, pale yellow or colorless, albuminous and alkaline.

Ovarian dropsy.—Leaving the *history* of this, as belonging to the special department of diseases of women, it is right to state that its diagnosis is important, but not always easy. Like ascites, it produces abdominal enlargement, with dulness on percussion and fluctuation. The most nearly constant points of distinction are, that the ovarian tumor begins somewhat on one side, and only by degrees becomes symmetrical; its shape is, throughout, more globular and coherent, and altered less by changes of position; and the intestines do not float up above the umbilicus so as to make a clearness of percussion-resonance there. The progress of ovarian dropsy is usually slower, and is attended by less proportionate depression of the general health.

Treatment of Dropsy.—Acute general dropsy, from suppression of the action of the skin and kidneys, should be treated by active purgation and the use of diuretics. Jalap and cream of tartar (gr. x of the former with $\mathfrak{z}\text{ij}$ to $\mathfrak{z}\text{iv}$ of the latter) every day or two, will answer well for catharsis. The diuretics most satisfactory are the infusion of juniper berries (a pint daily), acetate of potassium, citrate of potassium, squills, and sweet spirits of nitre [F. 37, 38, 39, 40]. When the patient is hard to purge, elaterium may be given, in gr. $\frac{1}{4}$ doses, every four hours till it operates. Murchison reports favorably of the use of *digitalis* both internally and *externally*,¹ in ascites.

Ascites, or other dropsy, from disease of any of the great organs, kidneys, liver, or heart, being less curable, and attended by greater general debility, needs more economy of strength. No doubt exists that real harm may be done by the routine of severe purging and plying with diuretics. The one may render the blood thinner and aggravate the constitutional disease, while the others, failing to remove the fluid by secretion, may even irritate the kidneys to

¹ Brit. Med. Journal, July 17, 1872.